PATENT

REMARKS

- Claims 90-108 were pending in the present application
- Claims 90-108 stand rejected

Upon entry of this amendment, which is respectfully requested for the reasons set forth below:

- Claims 98-108 will be pending
- Claims 98-99 and 106 will be amended
- Claims 90-97 will be cancelled
- Claims 98-99 and 108 will be the only independent claims

Telephone Interview

Applicants would like to thank the Examiner for the helpful telephone conversation held on June 18, 2001 with Applicants' representatives. The Examiner and Applicants' representatives discussed the present application in light of the cited references. Applicants' representatives suggested that the Valencia reference does not teach or suggest a feature generally directed to determining a discount "based on the time of the first discount," as recited in independent Claims 90-91, 97-99 and 108. Further, Applicants' representatives suggested that neither the Deaton reference nor the Valencia reference teaches or suggests a feature generally directed to determining a discount based on a time of a current transaction, a minimum transaction period and a discount adjustment period, as provided for in independent Claims 98-99 and 108.

While no formal agreement was reached, the Examiner agreed to reconsider the pending Claims in light of the telephone conversation and Applicants' remarks below.

Claim Amendments

1. Claim 106 has been amended to correct minor and obvious typographical errors

In Claim 106, "decreasing the second account" has been replaced correctly with "decreasing the first account." No new matter has been added.

2. Claims 98-99 have been amended to recite "providing the second discount to the customer"

No new matter has been added.

Section 112 Rejection

Claim 106 has been amended to recite "decreasing the first discount"

Claim 106 stands rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner notes that the feature of "determining a second discount" comprising "decreasing the second discount" is unclear. As noted above, this obvious

-4-

98-007 RESP to OA 03-21-01



PATENT

typographical error has been corrected to recite "decreasing the first discount." Thus, Applicants respectfully submit that Claim 106 is in condition for allowance.

Section 101 Rejection

Claims 90, 97-98 and 108 stand rejected under 35 U.S.C. 101 as not being "directed to an invention within the technological arts...." Claims 90-91, 94-96, 98-99 and 102-107 stand rejected under 35 U.S.C. 101 as "merely manipulat[ing] an abstract idea or perform[ing] a mathematical algorithm without any limitation to a practical application...." Applicants respectfully traverse the Examiner's Section 101 rejection.

1. Having a "useful, concrete and tangible result" is the only requirement under Section 101

Even though a mathematical algorithm is not patentable in isolation, a process that applies an equation to a new and useful end is at the very least not barred at the threshold by § 101. Diamond v. Diehr, 450 U.S. 175, 188 (1981). A claimed invention that produces a useful, concrete and tangible result constitutes statutory subject matter, regardless of whether the claimed invention includes a mathematical algorithm. AT & T Corp, 172 F.3d 1352, 1356, 50 USPQ2d 1447, 1451; State Street Bank, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601.

Each of Claims 90-108 includes the limitation of "a second discount". As explained in the Specification, such a discount constitutes a useful, concrete and tangible result. By determining the second discount associated with a customer in accordance with various embodiments of the present invention, a merchant can, e.g., provide a discount immediately to a current transaction of a customer, as well as provide an incentive for a customer to return, in order to reduce the time between visits by the customer, thereby increasing sales, customer satisfaction and customer loyalty. (See specification, page 19, lines 1-5).

2. "fail to recite a computer"

Applicants disagree with the Examiner's conclusion that a claim is non-statutory if that claim is directed to a series of steps to be performed on a computer but does not recite "a series of steps performed on a computer or point of sale device"

Applicants note that there is no such requirement that a method claim "recite/define a series of steps performed on a computer or point of sale device" in order to be statutory. Accordingly, the rejection should be withdrawn. If this rejection is maintained, Applicants request an appropriate and explicit basis for rejection.

3. "not within technological arts"

There is no requirement that a invention be "in the technological arts". Applicants request an explanation of the basis for such a rejection, and an explanation of a definition of the "technological arts".

4. "no physical acts outside the computer / result in the object having a different physical attribute or structure"

Physical transformation by a claimed process is "not an invariable requirement, but merely one example of how a mathematical algorithm may bring about a useful application." (cmphasis added) AT & T Corp., 172 F.3d at 1357, 50 USPQ2d at 1452. See also, Diehr, 450



PATENT

U.S. at 192 (the "e.g." signal denotes that physical transformation is an example, not an exclusive requirement for satisfying § 101); Arrhythmia Research Tech., 958 F.2d 1053, 1060, 22 USPQ2d 1033, 1039 (Fed. Cir. 1992) (the transformation simply confirmed that Arrhythmia's method claims satisfied § 101 because the method produced a number which had specific meaning - a useful, concrete, tangible result - not a mathematical abstraction).

Section 103(a) Rejection

1. Claims 90-105 and 107-108 are not obvious in light of Deaton or Valencia, either alone or in combination

Claims 90-105 and 107-108 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,687,322 issued to Deaton et al. ("Deaton"), and further in view of U.S. Patent No. 5,380,991 issued to Valencia et al. ("Valencia"). Applicants respectfully traverse the Examiner's Section 103(a) rejection.

a) No teaching or suggestion of determining a second discount based on the time of a first discount

As the Examiner notes, Deaton fails to disclose "determining a second discount based on...the time of the first discount," as recited in each of independent Claims 90-91, 97-99 and 108.

Valencia does not teach or suggest determining the second discount based on a time of the first discount. Specifically, the time of the first discount is irrelevant to the Valencia system, which is concerned only with whether a purchase of a qualifying product is made within a defined time period and how many qualifying purchases were made previously within that period (see, e.g., column 6, lines 10-21, describing how "[p]rogrammed into the erasable memory of the smart card would be... an indication that a particular item subject to the progressive couponing system has been purchased. The smart card would then be updated by indicating an initial or subsequent purchase of an item subject to the progressive couponing system.").

b) The proposed modification of Deaton in light of Valencia would change the principle of operation of the Deaton system

The Examiner asserts that it would have been obvious to modify the method of Deaton to "include the ability to monitor the time of discounts awarded to consumers for the purpose of awarding additional coupons of increasing value to entice the consumer to make repurchases at a subsequent time...." Applicants respectfully traverse this assertion.

Deaton clearly teaches away from providing discounts of increasing value to customers making repurchases within a predetermined time period, as described in Valencia. The principle of operation of Deaton is to award greater incentives to customers that act undesirably. See, e.g., column 102, lines 53-65. This is contrary to the claimed feature, which generally serves to award greater incentives to customers that act desirably. To modify the Deaton system to include the above feature would require a change in the principles under which Deaton operates.

-6-



PATENT

Conclusion

For the foregoing reasons it is submitted that all of the pending Claims 98-108 are now in condition for allowance and the Examiner's early re-examination and reconsideration are respectfully requested.

Alternatively, if there remains any question regarding the present application or any of the cited references, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is cordially requested to contact Dean Alderucci at telephone number (203) 461-7337 or via electronic mail at alderucci@walkerdigital.com. Please charge any additional fees that may be required for this Response, or credit any overpayment to Deposit Account No. 50-0271.

June 21, 2001 Date

Dean Alderucci

(203) 461-7300 /fax

Respectfully submitted,

Attorney for Applicants Registration No. 40,484 alderucci@walkerdigital.com Walker Digital Corporation Five High Ridge Park Stamford, CT 06905-1326 (203) 461-7337 /voice

À

Application No.: 09/049,297 Attorney Docket No.: 98-007 PATENT

Marked-Up Version

IN THE CLAIMS:

Please AMEND Claims 98-99 and 106 as follows:

98. A method for determining a discount, the method comprising:

receiving a customer identifier that indicates a customer;

determining a previous purchase associated with the customer and a time of the previous purchase;

determining a first discount associated with the customer and a time of the first discount;

determining a current transaction associated with the customer and a time of the current transaction;

determining a first difference between the time of the current transaction and the time of the previous purchase;

determining a second difference between the time of the current transaction and the time of the first discount; [and]

determining a second discount based on whether the first difference is less than a predetermined minimum transaction period and whether the second difference is greater than a predetermined discount adjustment period; and

providing the second discount to the customer.

99. A method for determining a discount, the method comprising:

receiving a customer identifier that indicates a customer;

determining a previous purchase associated with the customer and a time of the previous purchase;

determining a first discount associated with the customer and a time of the first discount;

determining a current transaction associated with the customer and a time of the current transaction;

determining a first difference between the time of the current transaction and the time of the previous purchase;

determining a second difference between the time of the current transaction and the time of the first discount; [and]

determining, on a data processing device, a second discount based on whether the first difference is less than a predetermined minimum transaction period and whether the second difference is greater than a predetermined discount adjustment period; and

providing the second discount to the customer.

106. (AMENDED) The method of claim 99, in which determining [a] the second discount further comprises:

decreasing the [second] first discount by a predefined value, if the first difference is not less than the predetermined minimum transaction period.

9